MOD 17 (PSN/NPP)
Collection 4 Algorithm Readiness

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Changes for MOD17 in Collection 4

- **New lookup table (BPLUT)**
  - Benefit: Strengthened VPD control to improve results in both 8-day PSN/GPP and yearly NPP

- **Fixed DAO unit conversion problem**
  - Benefit: Correct calculations

- **Added SDS to MOD17A2 (8-day product)**
  - Benefit: Provides 8-day PSN and GPP to separate Respiration components

Changes in Collection 4 (2)

- **Input DAO change from GEOS3 to GEOS4**
  - Benefit: Will see over time, as we continue DAO validation work

- **MOD17A3 (NPP) QA**
  - Benefit: Simplification and correctness

- **Projection change from ISIN to SIN**
  - Benefit: ???

- **Data type change in a temp SDS in MOD17A1**
  - Benefit: Prevents overflow

Remaining Issues

- Low values in tropical regions – possibly results of high LAI values, and low incident radiation from DAO

- Transition to MODIS derived landcover for MOD15 *and* MOD17

Expected Changes

- Improved QA scheme for MOD17A3 (yearly NPP)
  - During Collection 4
- Other changes will depend on the results of the Collection 4 runs with the GEOS4 DAO data
- Addition of the CMG product
  - During Collection 4